# Overview of Relevant Codes and Standards Organizations NFPA (National Fire Protection Association)

NIST Standards in Trade Workshop on Concrete and Cement

9-13 December 2002



## NFPA: Basic Background

- National Fire Protection Association
- Founded in 1896
- Approximately 300 employees
- Mission: To reduce the worldwide burden of fire and other hazards on the quality of life by developing and advocating scientifically based consensus codes and standards, research, training, and education



## Scope of Work

- Virtually all sectors of the built environment are impacted by NFPA codes and standards
  - Designers
  - Owners/Users
  - AHJ's
  - Contractors
- Approximately 310 codes and standards





#### Relevance to Codes

- Development of codes and standards
  - NFPA develops documents through the ANSI consensus process
- Technical Committee members directly drive change in the standards and codes through committees and general membership
- Some documents are stand alone:
  - NFPA 70, NFPA 101, NFPA 5000
- Some documents are key referenced documents
  - NFPA 10, NFPA 13, NFPA 72



Código de Seguridad

### **Development of Codes**

- Uniquely Open Process
  - Four Steps of Developing NFPA Codes and Standards
    - Report on Proposals (ROP)
    - Report on Comments (ROC)
    - NFPA Annual and Fall Meetings
    - Standards Council Issuance



- Process Step 1
  - Report on Proposals
    - Anyone can propose changes
    - Proposal form in all documents and on web
    - TC meets and acts on all proposals; can also develop committee proposals
    - TC is letter balloted on all actions (2/3 majority required)
    - TCC (large projects) also evaluates proposals
    - TCC is letter balloted on all actions (3/4 majority required)
    - All proposals published (in ROP) and widely distributed



- Process Step 2
  - Report on Comments
    - Anyone can comment on any proposed change
    - Comment form in the front of each ROP and on web
    - TC meets and acts on all comments; can also develop committee comments
    - TC is letter balloted on all actions (2/3 majority required)
    - TCC (large projects) also evaluates comments
    - TCC is letter balloted on all actions (3/4 majority required)
    - All comments published (in ROC) and widely distributed



- Process Step 3
  - NFPA Annual/Fall Meeting
    - Only published proposals and comments can be further addressed
    - Once a valid motion occurs, anyone can speak to the issue
    - Exception: anyone can move to return a committee's report



- Process Step 4
  - Standards Council Issuance
    - Adjudication of all outstanding appeals
      - Hearings are held with concerned parties
      - Final changes are limited to appeals
    - Documents are issued based on entire processing record



#### NFPA Codes

- Codes and Standards Hierarchy
  - NFPA Board of Directors
  - NFPA Standards Council
  - Technical Committees
    - 225 Technical Committees
    - 6,500 Volunteers
    - 300 plus codes and standards
  - Result: Open Consensus Process and Transparency in development of regulatory criteria



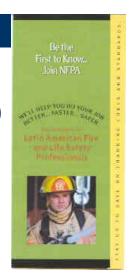
#### **NFPA Codes**

- Establishing the Consensus Body
  - Technical Committees
    - Carefully balanced and monitored
    - Reviewed continually
    - Nine interest categories
      - Applied Research/Testing Laboratory
      - Consumer
      - Enforcing Authority
      - Installer/Maintainer
      - Insurance
      - Labor
      - Manufacturer
      - Special expert
      - User



## **Membership Composition**

- 75,000 + total membership
  - International participation in approximately 110 countries
    - Individual members
  - International offices
    - France, Mexico, Hong Kong, and Canada
- One category of membership
  - All members are equal
- Members have access to special interest sections (16 sections total)
  - AEBO, Aviation, Electrical, etc.







## Means of Encouraging International Participation

- Outreach through local training, seminars and trade shows as well as a continually expanding website and website functionality
- A full range of support products built around our codes, research, data collection and analysis, NFPA Journal and Newsletter
- At present, of the 6,500 committee members, there are 185 technical committee members from 32 countries
- Key NFPA codes such as NFPA 101 used by US multi-nationals for offshore design and construction
- Participation in ISO, IEC, CIB projects



#### **Revenue Sources**

#### • Funding (Estimated for 2003)

NFPA Sales	Revenue	% of Revenue
Publication Sales	\$42,900,000	61%
Dues	\$8,900,000	13%
Professional Development	\$4,400,000	6%
Contracts	\$2,600,000	4%
Contributions	\$600,000	<1%
Other	\$10,600,000	15%



#### **Publications**

Types of publications

standards, codes, journals, handbooks, and related

publications

Member Publications

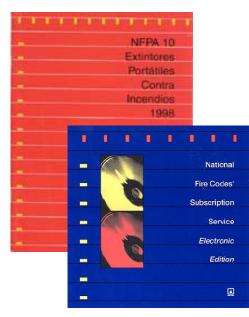
- NFPA Journal
- Fire Technology
- Fire News
- Annual directory
- NFPA Buyer's Guide
- Section newsletters





#### **Publications**

- Cycle of publication varies
  - Codes and standards (3-, 4-, and 5-year cycles)
  - Journal (quarterly)
- Format of publication
  - Both hard copy and electronic for most publications





## **Related Programs**

- Training/education
  - Seminars
    - National Electrical Code®
    - Life Safety Code®
    - National Fire Alarm Code
    - Automatic Sprinkler Systems
    - Evacuation Planning
    - Building Construction and Safety Code ®
  - Online Learning
    - Electrical, fire and Life safety, terrorism, bloodborne pathogens, etc.
  - Training videos
    - NEC, High-Rise Evacuation, Hot Work Operations, Respiratory Protection



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## **Related Programs**

#### Certification

- Fire Protection Specialist
- Fire Inspector I
- Fire Plans Examiner I
- More currently under development
  - Fire Inspector II
  - Master Electrical Inspector
  - Residential Electrical Inspector
  - Building inspector
  - Building plans examiner



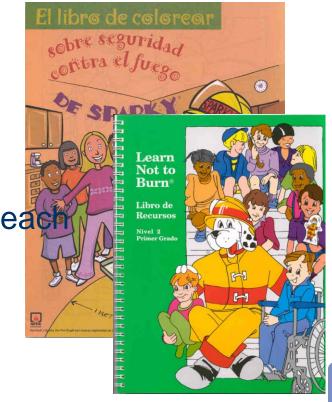


- NFPA Programs
  - Annual and Fall Meetings
  - Special technical conferences
    - World Safety Conference and Exposition
    - Fall Education Conference
  - Sponsored/Co-Sponsored Events
    - Fire Suppression & Detection Research Application Symposium (FPRF) Fire Expo
    - Americas Fire Expo
    - International Conference on Tall Buildings
      - CIB, Council on Tall Buildings and Urban Habitat, NIST, ISO, etc.





- Public education
  - Learn Not to Burn®
  - Fire Prevention Week
  - Risk Watch
  - Center for High Risk Outreach
  - Safe Cities
  - Champions





- Research Foundation
  - Coordinates independent research on fire risk and new technology
- Fire analysis and research
  - Database
  - Large-loss Fires
  - Fire Fighter Death and Injury Studies
  - Special Studies
- Building loss investigations
  - Conducts investigations of major losses and fires of technical or educational interest
  - ASCE/FEMA Building Performance Study on the World Trade Center

- Advisory services (written and verbal)
  - Engineering Division
  - Public Fire Protection Division
- Customer service
  - Extensive technical publications
  - Professional references
  - Code handbooks
  - Electronic products
  - Member catalogues
  - Expedited order fulfillment





#### **General Contact Information**

- Headquarters
  - 1 Batterymarch Park, Quincy, MA, 02269-9101 USA
  - +1 617.770.3000
  - +1 617.984.7110
  - Olga Caledonia,International Operations
- www.nfpa.org



